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(21) International Application Number: PCT/US99/17370 (22) International Filing Date: 30 July 1999 (30.07.99) (30) Priority Data: 60/094,785 31 July 1998 (31.07.98) US (71) Applicant (for all designated States except US): THE BOARD OF REGENTS OF THE UNIVERSITY AND COMMUNITY COLLEGE SYSTEM OF NEVADA, on behalf of the UNIVERSITY OF NEVADA-RENO [US/US]; 1664 North Virginia Street, Reno, NV 89503-1738 (US). (72) Inventor; and (75) Inventor/Applicant (for US only): DELAHANTY, David, J. [US/US]; 1880 Simpson Avenue, Reno, NV 89503 (US). (74) Agent: ADLER, Reid, G.; Morgan, Lewis & Bockius LLP, 1800 M Street, N.W., Washington, DC 20036 (US).		(81) Designated States: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG). Published <i>With international search report.</i>									
(54) Title: USE OF XANTHOPHYLL TO ACCENTUATE THE EFFECTS OF ESTROGEN											
<table border="1" style="margin: 10px auto; border-collapse: collapse;"> <caption>Bar Chart Data: % Body Mass</caption> <thead> <tr> <th>Group</th> <th>% Body Mass (Mean)</th> <th>n</th> </tr> </thead> <tbody> <tr> <td>XANTHOPHYLL</td> <td>1.0</td> <td>12</td> </tr> <tr> <td>CONTROL</td> <td>~0.25</td> <td>10</td> </tr> </tbody> </table>			Group	% Body Mass (Mean)	n	XANTHOPHYLL	1.0	12	CONTROL	~0.25	10
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XANTHOPHYLL	1.0	12									
CONTROL	~0.25	10									
(57) Abstract <p>The present invention provides methods and compositions comprising xanthophyll for use in accentuating the physiological effects of endogenous (or supplemental) steroids such as estrogens. Specifically, such methods and compositions are useful in enhancing and extending the reproductive capacity of game birds, and enhancing steroid-mediated reproductive responses in animals.</p>											